A3407

Work Order ID 106841

106841

September-11-13 11:46:59 AM

Item ID: D3407-5 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Ring

Start Date: 9/11/13 **Start Qty:** 20.00 *20* **Cust Item ID:**

Required Date: 9/11/13 **Req'd Qty:** 20.00 *20* **Customer:**

Reference:

Run Start *NR1*

Approvals: **Process Plan:** MLJ **Date:** 13-09-13 **Tooling:** _____ **Date:** _____ **Stop** *NR2*

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr / **Revision Nbr**									
D3407 / Rev E						41			
100	FLOW WATER JET	0.00				~~40~~	0		JM13-09-29
100									
Waterjet	**Memo**	0.00							
FLOW CNC Waterjet	1-Cut as per Dwg D3407								
17-4 1/4 x 4.000"	Dwg Rev: E								
	Prog Rev: E								
	2-Break edges on grinder as per Dwg D3407								
110	QC2- Inspect parts off machine FAI/FAIB	0.00				41			
110						~~40~~	0		JM13-09-29
QC	**Memo**	0.00							
Quality Control									

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimped
- ☐ Cuffs
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Ripples in Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damaged
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

Item ID: D3407-5 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Ring
Start Date: 9/11/13 **Start Qty:** 20.00 *20*
Required Date: 9/11/13 **Req'd Qty:** 20.00 *20*
Reference:
Cust Item ID:
Customer:

Run Start *NR1*
Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC8- Inspect parts - second check	0.00				41	13-10-03		DAC 09
120									
QC	**Memo**	0.00							
Quality Control									
130	Identify as per dwg & Stock Location: N/A	0.00				41			13-10-07
130									
Packaging	**Memo**	0.00							
Packaging	*****STOCK IN LARGE FAB*****								
140	QC21- Final Inspection - Work Order Release	0.00							13-10-7
140									
QC	**Memo**	0.00							
Quality Control									

13-10-

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Crosstube ☐
- Water Jet ☐
- Engineering ☐
- Machining ☐
- Small Fab ☐
- Prod. Eng. Coor. ☐
- Quality ☐
- Thermoforming ☐
- Finishing ☐
- Rec/Store/Packaging ☐
- Other ☐
- Large Fab ☐
- Composite ☐
- Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

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- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
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- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
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- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

Picklist Print

September-11-13 11:46:59 AM

Work Order ID: 106841

Parent Item: D3407-5

Parent Item Name: Ring

Start Date: 9/11/13 **Required Date:** 9/11/13

Start Qty: 20.00 **Required Qty:** 20.00

Comments: IPP Rev:A New Issue 05-11-22 JLM
IPP Rev:B Now on Waterjet 08-05-14 JLM Verified By:DD
IPP Rev:C 08-08-12 revE as per dwg (ecn 08-507) DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M174B0.250X4.000 17-4 SS Bar .250 X 4.00		Purchased	No			100	f	10.8000	**0.2666**	~~5.612632~~	10.8	JmB-09-29	

Location	Loc Qty	Loc Code
MAT049	10.8	
m126839	10.8	

126839

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

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- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

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- ☐ Out of Calibration
- ☐ Out of Sequence
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- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

DART AEROSPACE LTD	Work Order:	106841
Description: Tow Ring	Part Number:	D3407-5
Inspection Dwg: D3407 **Rev:** E		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

[X] First Article [] Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.250	+/-0.010	0.260"	–		V	JKmol
Ø3.000	+/-0.030	3.000"	–		V	
Ø2.050	+0.012/-0.001	2.052"	–		V	
0.75	+/-0.030	0.750"	–		V	

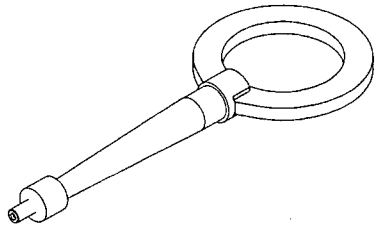
Measured by:	JM
Date:	13-09-29

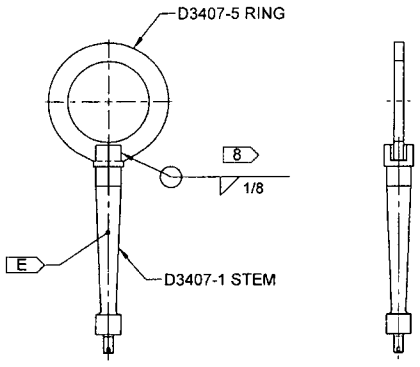
Audited by:	DAS 09 Sep 89
Date:	13-10-07

Prototype Approval:	N/A
Date:	N/A

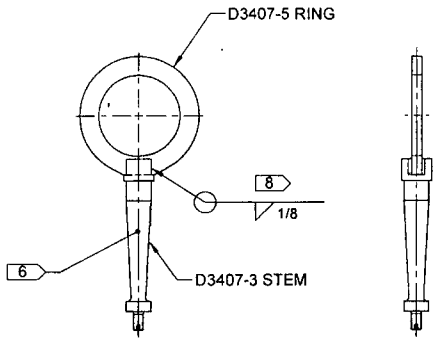
Rev	Date	Change	Revised by	Approved
A	07.02.02	New Issue	KJ/JLM	
B	07.09.18	Tolerance revised	KJ/EC	
C	08.05.14	Dimensions updated per Dwg Rev D	KJ/JLM	
D	09.05.04	Dwg Rev updated	KJ/DD	

QTY -041	QTY -043	QTY -045	PART NUMBER	DESCRIPTION
X			D3407-041	TOW RING
	X		D3407-043	TOW RING
		X	D3407-045	TOW RING
1			D3407-1	STEM
	1		D3407-3	STEM
1	1	1	D3407-5	RING
		1	D3407-7	STEM

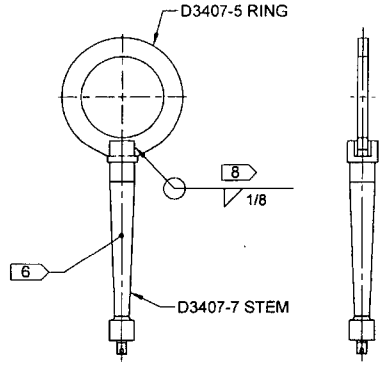




D3407-041 TOW RING



D3407-043 TOW RING



D3407-045 TOW RING E

SEE SHEET 1 FOR UNCONTROLLED COPY WARNING

106841 MCJ 13-09-13

RELEASED 08-08-01 MM

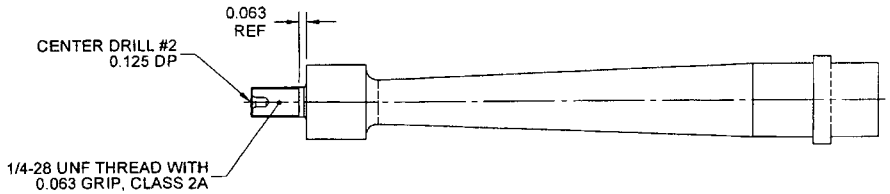
REV.	DESCRIPTION	BY	DATE
E	ADD D3407-045 (ZN B2-1, D8-1); ADD D3407-7 (ZN B6-5); REVISED NOTE 6 TO ADD IDENTIFICATION (ZN A5-1); REASON: PRODUCTION FACILITY	PH	08.07.23
D	D3407-1/-3 SLOT WAS ROUND NOW FLAT FOR ASSEMBLY WITH D3407-5 (ZN C2-2, C2-3); D3407-5 WAS ROUND NOW FLAT ON ONE END FOR ASSEMBLY WITH D3407-1/-3 (ZN B6-4); REASON: PRODUCTION FACILITY	PH	08.04.07
C	-1/-3 LONGER FOR FIT W/WASHER	CP	05.09.09
B	UPDATE DIAMETER, THREAD CLASS ADDED	CP	05.06.17
A	NEW ISSUE	CP	05.03.16

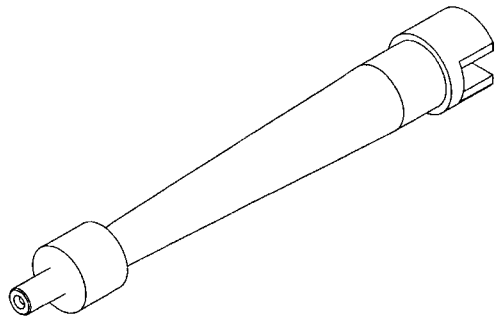
NOTES:
1) MATERIAL: N/A
2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3 (EXCEPT THREADS)
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3407-XXX" USING BLACK FINE POINT PERMANENT INK MARKER E
7) WEIGHT: D3407-041 - 0.60 lbs, D3407-043 - 0.53 lbs, D3407-045 - 0.61 lbs
8) WELD PER DART QSI 004 ON ALL EDGES BETWEEN STEM AND RING

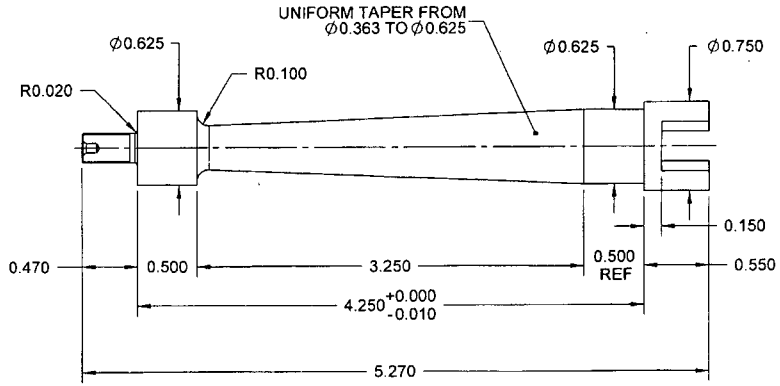
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DRAWN	PH	PORT HADLOCK, WA
CHECKED		DRAWING NO. D3407 REV. E
MFG. APPR.		SHEET 1 OF 5
APPROVED		TITLE TOW RING SCALE NTS
DE APPR.		
DATE	08.07.23	

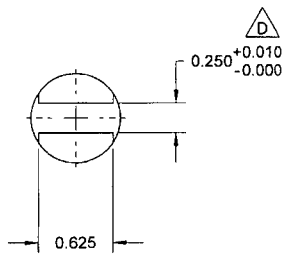
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106841









D3407-1 STEM

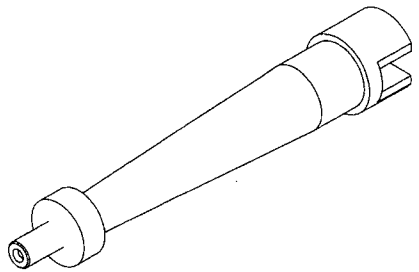
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05.05.23

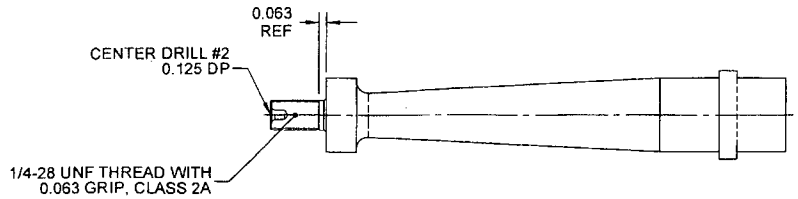
NOTES:
1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
6) IDENTIFICATION: N/A
7) WEIGHT: 0.33 lbs

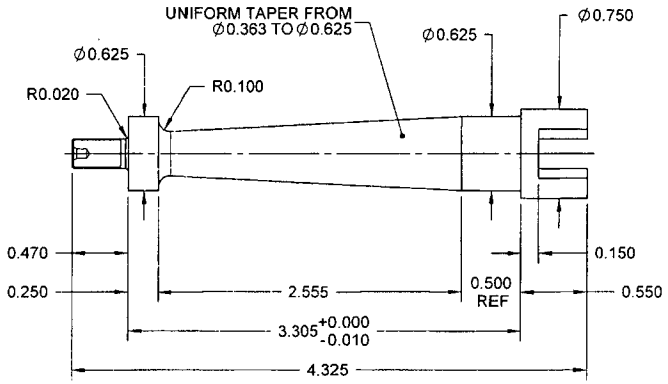
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CHECKED		DRAWING NO. D3407 REV. E
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APPROVED		TITLE TOW RING SCALE NTS
DE APPR.		
DATE 08.07.23		

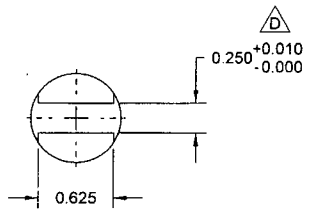
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106841









D3407-3 STEM

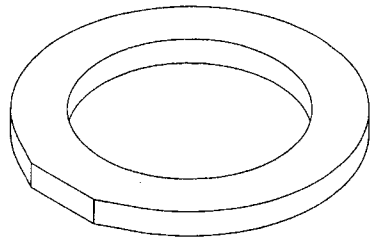
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04.05.01 MA

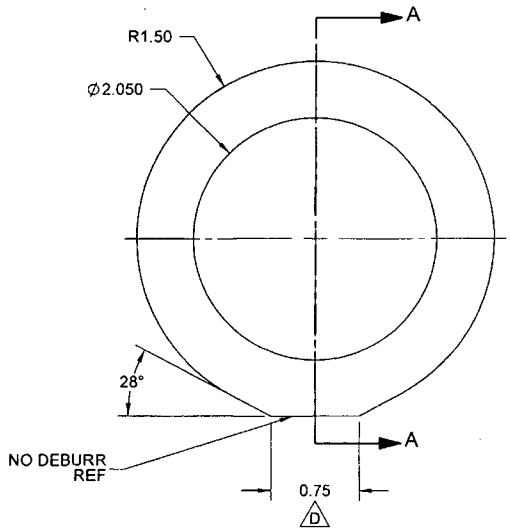
NOTES:
1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
6) IDENTIFICATION: N/A
7) WEIGHT: 0.27 lbs

DESIGN		DART AEROSPACE USA, INC. PORT HADLOCK, WA
DRAWN		
CHECKED		DRAWING NO. D3407 REV. E
MFG. APPR.		SHEET 3 OF 5
APPROVED		TITLE TOW RING SCALE NTS
DE APPR.		
DATE 08.07.23		

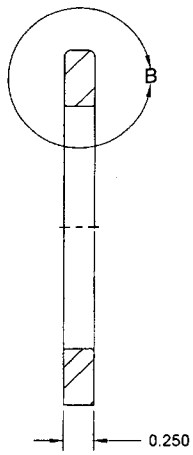
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106841

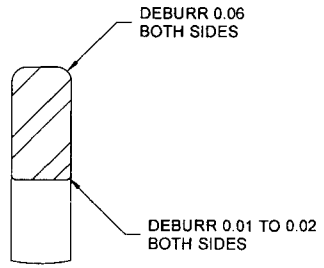




D3407-5 RING



SECTION A-A



DETAIL B
SCALE 2X

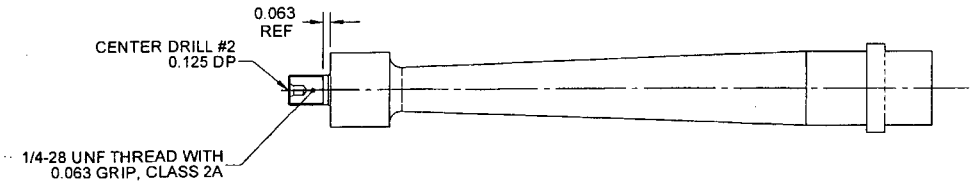
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08.08.2023

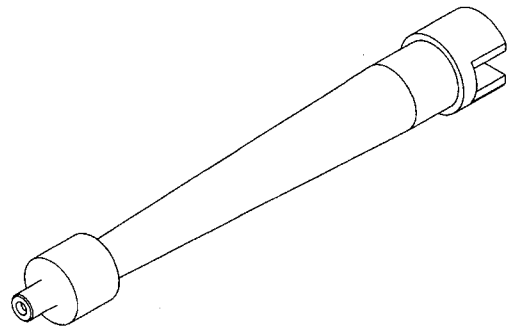
NOTES:
1) MATERIAL: 17-4 PH SS BAR PER AMS 5604/5643 (REF. DART SPEC M17-4-B)
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: N/A
7) WEIGHT: 0.27 lbs

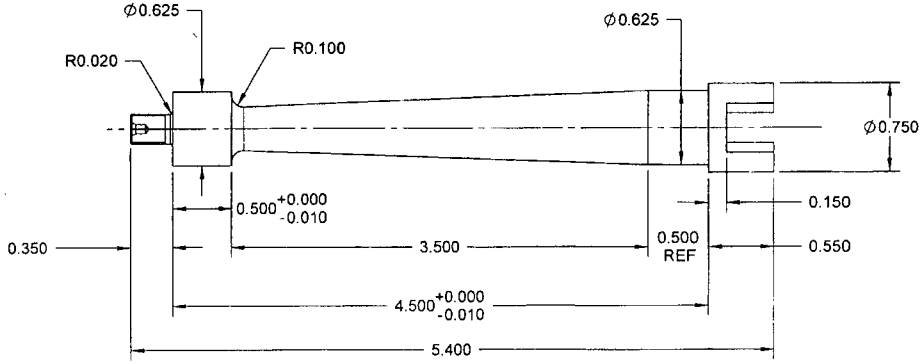
DESIGN		**DART AEROSPACE USA, INC.** PORT HADLOCK, WA
DRAWN		DRAWING NO. D3407 — REV. E — SHEET 4 OF 5
CHECKED		
MFG. APPR.		
APPROVED		TITLE: TOW RING — SCALE: NTS
DE APPR.		
DATE 08.07.23		

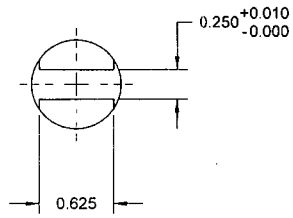
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106841









D3407-7 STEM

RELEASED
06-04-01

NOTES:
1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
6) IDENTIFICATION: N/A
7) WEIGHT: 0.34 lbs

DESIGN	AJS	**DART AEROSPACE USA, INC.** PORT HADLOCK, WA
DRAWN		
CHECKED		DRAWING NO. D3407 REV. E
MFG. APPR.		SHEET 5 OF 5
APPROVED		TITLE TOW RING SCALE NTS
DE APPR.		
DATE 08.07.23		

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